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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,521	06/26/2003	Robert J. Rafac	2003-0059-01	8728
<div>7590 12/14/2007</div> <div>William C. Cray c/o Cymer, Inc. Legal Dept. 17075 Thornmint Court San Diego, CA 92127</div> <div>EXAMINER PADGETT, MARIANNE L</div> <div>ART UNIT PAPER NUMBER</div> <div>1792</div> <div>MAIL DATE DELIVERY MODE</div> <div>12/14/2007 PAPER</div>				

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Interview Summary	Application No.	Applicant(s)	
	10/608,521	RAFAC ET AL.	
	Examiner	Art Unit	
	Marianne L. Padgett	1792	

All participants (applicant, applicant's representative, PTO personnel):

(1) Marianne L. Padgett. (3) _____

(2) Kevin Roddy. (4) _____

Date of Interview: 12 December 2007.

Type: a) ☒ Telephonic b) ☐ Video Conference
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.

If Yes, brief description: _____

Claim(s) discussed: 1.

Identification of prior art discussed: Art of record (Ruffner, Belleville, Pan et al.).


Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☒ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04): If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

☒ attached proposed amendment


MARIANNE PADGETT
PRIMARY EXAMINER

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

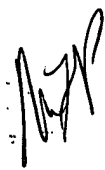
Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments:

Discussed attached proposed amendment. The amendment in the preamble would remove 112, first problems caused by "for reflecting electromagnetic radiation", and as discussed, the "wherein..." limitation added at the end of claim 1 (support noted on specification page 9) would remove the rejection over Ruffner & probably the one over Pan et al., however further review with respect to Belleville et al. is needed, especially considering the most generic treatment claims & that the specific or even generic types of dielectric layers being treated cannot be determined by the examiner from the claims or the specification as presently presented.

Further discussed clarifying the disclosed treatment process in the specification by supplying information as to what dielectric materials are actually being treated in the exemplary disclosure, which at present are only identified by tradenames & marketing information, hence needs to be clarified in the record, preferably by supporting prior documents.

It was further noted that update of the prior art search would be required with respect to amendment & probable modification of the search once the examiner can determine what multilayer dielectric materials were actually treated or considered in the processes disclosed in the specification, since at present she does not know if her guesses as to the materials represented by the tradenames were either close or correct, such that the search on what was actually intended may not be complete due to insufficient information, which can be supplied by identification of what the tradenames, etc., represent.

MLP/dictation software
12/12/2007.

A handwritten signature in black ink, appearing to be 'MLP', is located below the typed text.

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Dec. 11. 2007 3:40PM

PTOL - 413
attach to Interview Summary

No. 0144 P. 1

CERTIFICATE OF TRANSMISSION BY FACSIMILE (37 CFR 1.8) Applicant(s): Rafac			Docket No. 2003-0059-01	
Application No. 10/608,521	Filing Date June 26, 2003	Examiner M. Padgett	Group Art Unit 1792	
Invention: METHOD AND APPARATUS FOR STABILIZING OPTICAL DIELECTRIC COATINGS			Conf. No. 8728 (3 Pages Transmitted)	
<p>I hereby certify that this <u>Proposed Amended Claims</u> (Identify type of correspondence)</p> <p>is being facsimile transmitted to the United States Patent and Trademark Office (Fax. No. <u>571-273-1425</u>)</p> <p>on <u>Dec. 11, 2007</u> (Date)</p> <p><u>Sarah J. Briggs</u> (Typed or Printed Name of Person Signing Certificate)</p> <p><u>Sarah J. Briggs</u> (Signature)</p> <p>Note: Each paper must have its own certificate of mailing.</p>				

ProposedAtty. Docket No. 2003-0056-01
USSN 10/608,521

IN THE CLAIMS:

1. (Currently Amended) A method for stabilizing spectral shift in a multi-layered dielectric reflectivity coating located on a substrate ~~for reflecting electromagnetic radiation~~ after formation of the dielectric reflectivity coating on the substrate, comprising:

exposing the multi-layered dielectric reflectivity coating to a pretreatment of a sufficient amount of deep ultraviolet (DUV) laser radiation that is less than or equal to 300-nanometers in wavelength to induce sufficient compaction or densification by removal of water vapor in enough of the multi-layered dielectric reflectivity coating to inhibit subsequent compaction or densification during continued exposure to DUV or shorter wavelength radiation,

wherein the pretreatment is prior to use of the multi-layered dielectric reflectivity coated substrate in one or more applications that expose the coating to optical fluence.

2. (Previously Presented) The method of claim 1 further comprising:
the pretreatment laser radiation exposure amounts to energy of at least the equivalent of about 2 billion pulses of DUV radiation from a laser at 9 milliJoules per pulse.

3. (Previously Presented) The method of claim 2 further comprising:
the pretreatment laser radiation exposure amounts to the energy being delivered at about a 3KHz pulse repetition rate.

4. (Previously Presented) The method of claim 1 further comprising:
the pretreatment laser radiation exposure amounts to energy of at least the equivalent of 15-18 milliJoules per pulse of laser radiation delivered over about 700 million pulses to 1 billion pulses.

5. (Previously Presented) The method of claim 1 further comprising:
determining the amount of DUV laser radiation based upon a specified reduction in hygroscopicity of one or more layers of the multi-layered dielectric

Proposed, cont.

Atty. Docket No. 2003-0056-01
USSN 10/608,521

reflectivity coating, wherein a least one of the layers is hygroscopic.

6. (Previously Presented) The method of claim 1 further comprising:
determining the amount of DUV laser radiation based upon a specified reduction
in compaction of one or more layers of the multi-layered dielectric reflectivity coating.

7. (Previously Presented) The method of claim 1 further comprising:
determining the amount of DUV laser radiation based upon a specified reduction
in hygroscopicity and compaction of one or more layers of the multi-layered dielectric
reflectivity coating, wherein a least one of the layers is hygroscopic.